### REMARKS

This is intended as a full and complete response to the Final Office Action dated

December 28, 2007, having a shortened statutory period for response set to expire on March 28,

2008. Please reconsider the claims pending in the application for reasons discussed below.

### Claim Objections

The Examiner objected to claims 2, 4 and 15 due to informalities. In response, Applicants have amended claims 2 and 15, accordingly. Therefore, Applicants respectfully request the objection to claims 2 and 15 be removed. Additionally, Applicants have cancelled claim 4.

# Claim Rejections Under 35 U.S.C. § 103

The Examiner rejected claims 1-6, 8 and 15-17 under 35 U.S.C. § 103(a) as being obvious over *Shin* ("A novel optical signal-to-noise ratio monitoring technique for WDM networks", *Shin et al.*; Optical Fiber Communication Conference, 2000; Volume 2, 7-10 March 2000, Pages: 182-184) in view of *Ames* (U.S. Patent No. 6,661,817). The Examiner also rejected claim 18 under 35 U.S.C. § 103(a) as being obvious over *Chung* (U.S. Patent No. 6,433,864) and *Kang* (U.S. Patent No. 6,268,943). In response, Applicants have amended claims 3 and 15 and respectfully traverse the rejection to claim 1. Additionally, Applicants have cancelled claims 4, 5, 17 and 18, thereby obviating the rejection

Claim 1 includes the limitation of "sampling 1024 points." As amended, claims 3 and 15 recite similar limitations. As admitted by the Examiner in the Office Action, Shin does not disclose this limitation. The Examiner also states in the Office Action that it would have been obvious to one of ordinary skill in the art at the time the invention to calculate the average optical power of the A to D converted continuous voltage using 1024 continuous samples for the calculation, since averaging over any large number of points results in a more accurate average than averaging over a small number of points. Applicants respectfully disagree that it would have been obvious to one of ordinary skill in the art to sample 1024 points for use in calculating an optical signal to noise ratio (OSNR). The Examiner admits that using a larger number of points provides more accurate averaging than using a smaller number of points. Following this reasoning, a person of ordinary skill in the art would have used a larger number of points in Shin

(> 65,536), not a smaller number of points (i.e., 1024 points). Furthermore, Shin clearly states that 65,526 sample points are needed to calculate an optical signal to noise ratio (see Shin, section II, Experiments). Ames also does not cure the deficiency of Shin. In sum, in light of Shin and Ames, it would not have been obvious to one of ordinary skill in the art to sample 1024 points in the digital signal continuously at a frequency for use in calculating an optical signal to noise ratio (OSNR) from a noise spectrum density and an average sampled points, as recited in claims 1, 3, and 15.

As the foregoing illustrates, the combination of *Shin* and *Ames* fails render claims 1, 3 and 15 obvious. Therefore, Applicants respectfully request the 103(a) rejection of claims 1, 3 and 15 be removed and the allowance of the same. Additionally, the claims dependent from claims 1, 3 and 15 are allowable for at least the same reasons as claims 1, 3 and 15.

## Double Patenting

Claim 18 is provisionally rejected on the grounds of non-statutory obviousness-type double patenting as being unpatentable over claim 1 of co-pending Application No. 11/546,075 in view of *Chung* (U.S. Pat. No. 6,433,864). As set forth above, Applicants have cancelled claim 18.

### Conclusion

Having addressed all issues set out in the Final Office Action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed.

Respectfully submitted,

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